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Result
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Maximum DB
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.

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67
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83.366 Million cell updates/sec
                                                glutathione transf actin 7 - soybean microbial collagen glandular kallikre glutathione transf T-cell antigen recl Ig H chain V-D-J r bradykinin-like pe alpha-peptide/algin
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Ig kappa chain V-I
Ig kappa chain V-I
neurotensin - bovi
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ALIGNMENTS

RESULT 1
S47361
T-cell antigen receptor VJ junction beta chain - human
C;Species: Homo sapiens (man)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 05-Nov-1999
C;Accession: S47361
R;Lehner, P.J.
R;Lehner, P.J.
R;Denscription: Human HLA-A0201 restricted recognition of influenza A is domi
A;Reference number: S47355
A;Accession: S47361

of influenza A is dominated by

H

Qy 6 SPYTLLKG 13 : :: Db 3 TPWKVLSG 10	Query Match 29.9%; Score 20; DB 2; Length 13; Hest Local Similarity 37.5%; Pred. No. 1.6e+03; Matches 3; Conservative 3; Mismatches 2; Indels 0; Gaps 0;	absoluted a dipeptidyl-peptidase IV (BC 3.4.14.5) - bovine (fragment) G;Species: Bos primigenius taurus (cattle) C;Species: Bos primigenius taurus (cattle) C;Date: 05-Jan-1996 #sequence_revision 05-Jan-1996 #text_change 05-Jan-1996 C;Accession: B56864 R;Plakidou-Dymock, S.; McGivan, J.D. Biochim. Biophys. Acta 1145, 105-112, 1993 A;Title: The oligomeric structure of renal aminopeptidase N from bovine brush-border A;Accession: B56864; MUID:93136203; PMID:8093665 A;Accession: B56864 A;Status: preliminary A;Molecule type: protein A;Residues: 1-13 < Pla> A;Resperimental source: renal brush-border membrane vesicles C;Keywords: dipeptidylpeptide hydrolase	A; Status: preliminary A; Status: preliminary A; Status: preliminary A; Molecule type: mRNA A; Residues: 1-13 < LEH> A; Residues: 1-13 < LEH> A; Cross - references: EMBL: Z35685; NID: g527459; PIDN: CAA84754.1; PID: g527460 C; Keywords: T-cell receptor Query Match Query Match Best Local Similarity 80.0%; Pred. No. 1.6e+03; Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0; Qy 4 QVSPY 8

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R;Johnsen, A.H.; Rehfeld, J.F.
Eur. J. Blochem. 213, 875-879, 1993
Eur. J. Blochem. 213, 875-879, 1993
A;Title: LymnaDFamides, a new family of neuropeptides from A;Reference number: S32471; MUID:93238777; PMID:8477756
A;Recession: S32473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Residues: 1-13 <BR2> C;Comment: This protein is one of monoclonal IgM reactive with myelin-associated glycop: C;Keywords: glycoprotein; heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Brouet, J.C.; Dellagi, K.; Gendron, M.C.; Chevalier, A.; Schmitt, C.; Mihaesco, E. J. Exp. Med. 170, 1551-1558, 1989
A;Title: Expression of a public idiotype by human monoclonal IgM directed to myelin-asso A;Reference number: A61458; MUID:90039128; PMID:2478651
A;Accession: PL0157
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PL0157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Experimental source: ganglia C;Keywords: amidated carboxyl f F;13/Modified site: amidated carboxyl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Lymnaea stagnalis (great pond snall)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 20-Aug-1999
C;Accession: S32473
                                                                                                                                                                                                            Ig kappa chain V-I region (BLA) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 15-Oct-1994 #sequence_revision 15-Oct-1994 #text_change 16-Aug-1996
C;Accession: B61488
C;Accession: B61488
R;Brouet, J.C.; Dellagi, K.; Gendron, M.C.; Chevalier, A.; Schmitt, C.; Mihaesco,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: protein A; Residues: 1-13 <BRO>A; Accession: C61458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ig kappa chain V-II region (anti-myelin-associated glycoprotein, PEC) - huma C;Species: Homo sapiens (man)
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 07-Feb-1997 C;Accession: PL0157; C61458
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                                                                                                                         A;Title: Expression of a public idiotype by human monoc A;Reference number: A61458; MUID:90039128; PMID:2478651 A;Accession: B61458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Status: preliminary
                                     A; Molecule type: protein A; Residues: 1-13 <BRO> C; Keywords: heterotetram
                                                                                                    A; Status: preliminary
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Best Local
                                       ;Keywords: heterotetramer; immunoglobulin
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L; Mismatches
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Pred. No. 2.4e+03;
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Query Match

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Score 18;

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J. Exp. Med. 170, 1551-1558, 1989
A;Title: Expression of a public idiotype by human monoclonal A;Reference number: A61458; MUID:90039128; PMID:2478651
A;Accession: A61458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ig kappa chain V-I region (BOU) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 15-Oct-1994 #sequence_revision 15-Oct-1994 #text_change 16-Aug-1996
C;Accession: A61458; PL0156
R;Brouet, J.C.; Dellagi, K.; Gendron, M.C.; Chevalier, A.; Schmitt, C.; Mihaesco,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Residues: 1-13 <BRO>
C;Comment: This protein is one of monoclonal IgM reactive with C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Species: Bos primigenius taurus (cattle) C;Date: 18-Dec-1981 #sequence_revision 18-C;Accession: A01420
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extracellular lipase - Pseudomonas aeruginosa (fragment) C;Species: Pseudomonas aeruginosa (C;Species: Pseudomonas aeruginosa C;Date: 31-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 31-Oct-1997 C;Accession: A44818 R;Gilbert, E.J.; Cornish, A.; Jones, C.W.
                                                                                                                                                                                                                                                                                                                                             A;Note: a tridecapeptide chemically and pharmacologically identical with the natural pept C;Superfamily: neurotensin C;Keywords: neuropeptide; pyroglutamic acid F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Carraway, R.; Leeman, S.E.
J. Biol. Chem. 250, 1912-1918, 1975
A;Title: The synthesis of neurotensin.
A;Reference number: A92173; MUID:75095679; PMID:1112838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: protein
A; Residues: 1-13 < CAR>
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A;Title: The amino acid sequence of a hypothalamic peptide,
A;Reference number: A92172; MUID:75095678; PMID:1167549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            neurotensin
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                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Contents: annotation; synthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Experimental source: hypothalamus
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0; Mismatches 1
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                                                                                                                                                                                                                                                                                            DB 1;
5.9e+03;
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                                                                                                                                             A;Experimental source: rectum C;Comment: The peptide isolated from rectum is identical with C;Superfamily: neurotensin
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A;Title: The amino acid sequence of a smooth muscle-contracting A;Reference number: A28505; MUID:88063566; PMID:3682409
A;Accession: A28505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEBS Lett. 202, 187-191, 1986
A;Title: [Ser(7)]neurotensin: isolation from guinea pig A;Reference number: A53608; MUID:86248085; PMID:3087775
A;Accession: A53608
                                                                                                                                                                                                               A; Molecule type: protein
A; Residues: 1-13 < IWA>
                                                                                                                                                                                                                                                                                                                                          neurotensin [validated] - chicken
C;Species: Gallus gallus (chicken)
C;Date: 19-Nov-1988 #sequence_revision 18-Aug-2000 #text_change 18-Aug-2000
C;Accession: A28505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C/Superfamily: neurotensin
C:Keywords: neuropeptide; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic ac
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FEBS Lett. 202, 1
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A53608
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        neurotensin - guinea pig
C;Species: Cavia porcellus (guinea pig)
C;Date: 07-Oct-1994 #sequence_revision
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                                                                                             ;Keywords: hormone; neuropeptide; pyroglutamic acid;1-13/Product: neurotensin #status experimental <NTS>;1/Modified site: pyrrolidone carboxylic acid (Gln) #
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A; Residues: 1-13 <GIL>
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A;Title: Purification and properties of extracellular lipase from Pseudomonas aeruginoss
A;Reference number: A44818; MUID:92085040; PMID:1748875
A;Accession: A44818
                                   Best Loc
Matches
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                                              25.4%;
75.0%;
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75.0%;
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                                            Score 17; DB 2;
Pred. No. 5.9e+03;
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Pred. No.
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Pred. No. 5.9e+03;
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A;Accession: A05174
A;Molecule type: protein
A;Molecule type: MONN
C;Superfamily: unassigned animal port;
C;Keywordd: pyroglutamic acid; skii
F;1/Modified site: pyrrolidone carl
                                                                                                                                                                                                                                                                                                                           RESULT 13
PT0256
                                                                                                                                               R)Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G. J. Exp. Med. 173, 395-407, 1991
A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity and A;Reference number: PT0222; MUID:91108337; PMID:1899102
                                                                                                                                                                                                                             C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996
C;Accession: PT0256
                                                       A; Experimental source: B lymphocyte C; Keywords: heterotetramer; immunoglobulin
                                                                                                   A; Molecule type: DNA
A; Residues: 1-13 < YAM>
                                                                                                                                          A; Accession: PT0256
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Montecucchi, P.C.; Gozzini, L.; Erspamer, Int. J. Pept. Protein Res. 27, 175-182, 1986 A;Reference number: A05174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tryptophyllin-13 - Rohde's leaf frog
C;Species: Phyllomedusa rohdei (Rohde's leaf frog)
C;Date: 05-Jun-1987 #sequence_revision 05-Jun-1987
C;Accession: A05174
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A;Title: Isolation and primary structure of an amphibian neurotensin. A;Reference number: A61067; MUID:92245104; PMID:1574601
A;Accession: A61067
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    common frog

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pyrrolidone carboxylic acid (Gln) #status experimental
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pyrrolidone carboxylic acid (Gln) #status experimental
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50.0%;
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Pred. No. 5.9e
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Score 17;
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Pred. No.
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DB 2;
5.9e+03;
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              Length
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equinatoxin 1A — sea anemone (Actinia equina) (fragment)
C;Species: Actinia equina
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999
C;Accession: PC1149
R;Komatsu, S; Furukawa, K.; Abe, K.; Hirano, H.; Ueda, M.
Chem. Pharm. Bull. 40, 2873-2875, 1992
A;Title: Isolation and characterization of equinatoxins from the sea anemone Actinia equinatoric number: PC1149; MUID:93099631; PMID:1361161
A;Accession: PC1149
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C;Species: Schistosoma japonicum
C;Schistosoma japonicum
C;Species: Schistosoma japonicum
C;Species: Schistos
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A; Residues: 1-13 < KOM>
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Search completed: October Job time : 16 secs
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Best Local Similarity 60.0%;
Matches 3; Conservative
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Best Local Similarity 50.0
Matches 3; Conservative
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       hits satisfying chosen parameters:
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NP3 LYMST
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UN12 CLOPA
UP51 UPSIN
BRK PARID
CRBL VESMA
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                                                                                                                                                                                                   P54836 canis famil
P42718 parapolybia
P80180 lymnaea sativ
P81796 bufo marinu
P32560 cavia porce
P13724 gallus gall
P41536 rana tempor
P40496 phyllomedus
P80578 hydra atten
P8238 oncorhynchu
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P8155 clostridium
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P81353 respo manda
P81732 vespa manda
P81732 microplitis
P80178 lymnaea sta
P80179 lymnaea sta
P80179 canis famil
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P81303
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3 eubacterium
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RESU CHES ID AC DT DT DT DT DT	Oy Db	RD R	88888	668	R R R R R R R R R R R R R R R R R R R	R 0 0 0 0 8		RES		
RESULT 2 CHEP_PARID ID CHEP_PARID AC P42718; DT 01-NOV-1995 DT 01-NOV-1995 DT 01-NOV-1995 DT 01-NOV-1995 Chemotactic OS Parapolybia	Best Local Matches	InterPro; IPAOO InterPro; IPROO PROSITE; PSO047 Oxidoreductase; NON TER 13 SEQUENCE 13 A	-!- SUI	Electroph -!- CATAL	SEQUENCE. TISSUE-Heart; MEDLINE-98163340; Dunn M.J., Corbet "HSC-2DPAGE and t	Canis Canis Eukaryo Mammal: NCBI_Ta	DT 01-0CT-1996 (DT 01-0CT-1996 (DT 15-UUL-1998 (DE Isocitrate de DE (EC 1.1.1.41) DE (Fragment).	ULT 1 A CANFA IDHA CO		C C C C C C C C C C C C C C C C C C C
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STANDARD (Rel. 32, C (Rel. 32, L (Rel. 32, L peptide, peptide, findica,	larity Conserva PYTLLKG : TVTLIPG	836; 1804; 0; II NAD; A; 1	Heteroratio LAR LOC TY: Bel	ctrophoresis 18:2795 CATALYTIC ACTIVITY: NADH.	מ בר מ	Canis familiaris (Do Canis familiaris (Do Eukaryota; Metazoa; Mammalia; Eutheria; NCBI_TaxID=9615;	6 (Rel. 34, Cre 6 (Rel. 34, Las 8 (Rel. 36, Las dehydrogenase 41) (Isocitric	STANDARD		17.99 117.99 116.44 116.44 116.44 116.44 116.44
real ast	40.0% ive 3	bog. ; Isodh. DH IMDH;); Tricar 13 1356 MW;	Ty N:1 micom	н ^г	bMed=9 .M., W two-di	(Dog). Da; Chordata; ia; Carnivora;		ARD;		11331113
PRT ed) sequen annota	2; Mismato	d og	er of subunits a :1 (By similarit Mitochondrial. o the isocitrate	802(1997). socitrate +	PubMed=9504812; J.M., Wheeler C.H.	ta; Craniata ora; Fissipeo	aated) it sequence upd it annotation u [NAD] subunit dehydrogenase)	PRT;	ALIG	PSAJ UHA3 VG16 AU11 BPP1 CRBL CRBL CRBC CRTC CRTC CRTC CRTC CRTC GER1
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	O O	ond	beta, and gamma isopropylmalate	oxoglutarate +	sis databa	Euteleost Canis.	mitochondrial specific ICDH>			P17229 F P56535 C P80867 K P82386 1 P82386 1 P01020 b P17237 i P17235 v P17235 v P17235 v P17235 v P17235 v P17235 v
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

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Toki T., Yasu
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Vespidae;
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01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last sequence update)
01-JUL-1993 (Rel. 26, Last annotation updat
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Eisei Dobutsu 39:105-111(1988).
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  28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 42, Last annotation update)
10-OCT-2003 (Rel. 42, Last annotation update)
Ferritin 2, chloroplast (Fragment).
Pisum sativum (Garden pea).
Pisum sativum (Garden p
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=93238777; PubMed=8477756;
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NCBI_TaxID=6523;
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Eukaryota; Metazoa; Mollusca; Gastropoda; Pulmonata; Basommatophora;
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5C950CE8E39D5873 CRC64;
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Best Local
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SEQUENCE, SUBCELLULAR LOCATION, AND TISSUE SPECIFICITY.
SEQUENCE, Laxton's Progress; TISSUE-Leaf;
STRAIN=cv. Laxton's Progress; TISSUE-Leaf;
Shingles R., McCarty R.E.;
Submitted (SEP-2002) to Swiss-Prot.
-!- FUNCTION: Ferritin is an intracellular molecule that stores iron in a soluble, nontoxic, readily available form. The functional molecule, which is composed of 24 chains, is roughly spherical an contains a central cavity into which the polymeric ferric iron contains a central cavity into which the polymeric ferric iron
                                                                                                                                                                                                                                                                                                                                                                                 NEUT_BUFMA
P81796;
16-OCT-2001
16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              core is deposited.

-:- SUBCELLULAR LOCATION: Chloroplast (inner envelope membrane), and other plastids.

-:- TISSUE SPECIFICITY: Leaves.

-:- TISSUE SPECIFICITY: Leaves.

-:- MISCELLANBOUS: On the 2D-gel the determined pI of this protein is 4.74, its MW is: 25.7 kDa.

4.74, its MW is: 25.7 kDa.
                                                                                                                                                                                                                                                                                                                                                                                                                                   BUFMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR001519; Ferritin.
InterPro; IPR009040; Ferritin like.
PROSITE; PS00204; FERRITIN 2; PARTIAL.
PROSITE; PS00540; FERRITIN 1; PARTIAL.
PROSITE; PS50905; FERRITIN LIKE; PARTIAL.
                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Bufonidae; Bu NCBI TaxID=8386;
                                                                                                             -!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the neurotensin family.
Vasoactive; Pyrrolidone carboxylic acid.
MOD_RES 1 1 PYRROLIDONE CARBOXYLI
                                                                                                                                                              SEQUENCE
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                                                                                                                                                                                                                                                      MEDLINE=99000115; PubMed=9786176;
                                                                                                                                                                                                                                                                   TISSUE=Small intestine;
                                                                                                                                                                                                                                                                                                                                                        Neurotensin (NT).
                                                                                                                                                                                                                                                                                                                                                                    28-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Iron storage; Iron; Metal-Binding; Chloroplast.
NON_TER 13 13
                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                               SEQUENCE, AND SYNTHESIS.
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4; Conserv
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                                                            Similarity
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PYIL
                         PYTL 10
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                                               25.4%;
nilarity 75.0%;
Conservative
                                                                                                   13 AA;
                                                                                                                                                                                                                                                                                                                                                                 (Rel. 40, Created)
(Rel. 40, Last sequence up
(Rel. 41, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
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Pred. No.
                                                  Score 17; DB pred. No. 3.26 0; Mismatches
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                                                                                                     56BD9F3A35410DD3
                                                                                                                   PYRROLIDONE CARBOXYLIC ACID
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2e+03;
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Best Local :
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Best Local
                                                                                                                                                             Vasoactive; Pyrrolidone carboxylic acid.

PYRROLIDONE CARBOXYLIC ACID.
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01-OCT-1993
01-OCT-1993
28-FEB-2003
                                                                                                                                                                                                                                                                                                                   Iwabuchi H., Komori S., Ohashi H., Kimura S.;
"The amino acid sequence of a smooth muscle-contracting chicken rectum. Identity to chicken neurotensin.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gallus gallus (Chicken).
Eukaryota; Metazoa; Chor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shaw C., Thim L., Conlon J.M.; "[Ser7] neurotensin: isolation from guinea pig intestine."; FEBS Lett. 202:187-192(1986).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Neurotensin
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Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NEUT
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PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cavia porcellus (Guinea pig).
Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Archosauria; Aves;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=86248085; PubMed=3087775;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=10141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SSUE=Small intestine
                                                                                                                                                                                                                                      . J. Pharmacol. 44:455-459(1987).
FUNCTION: Smooth muscle-contracting peptide.
SUBCELLULAR LOCATION: Secreted.
SIMILARITY: Belongs to the neurotensin famil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FUNCTION: Smooth muscle-contracting peptide.
SUBCELLULAR LOCATION: Secreted.
SIMILARITY: Belongs to the neurotensin family.
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PYIL 13
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                                                                            Conservative
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(Rel. 13, Last seq
(Rel. 41, Last ann
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(Rel.
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27,
41,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Chordata; Craniata; Vertebrata; Euteleostomi; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1680 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chordata;
                                                                                                  25.4%;
75.0%;
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75.0%;
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                                                                                                Score 17;
Pred. No.
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Pred. No.
                                                                                                                                                           4C949E714C410DD3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; Euteleostomi;
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                                                                                                                   DB 1;
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                                                                            1; Indels
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                                                                                                                                                                                                                                                                                                                                               PHYRO
                                                                                                                                                                                                                                                                                    TY13_PHYRO STANDARD; PRT; 13 AA. P04096; 01-NOV-1986 (Rel. 03, Created) 01-NOV-1986 (Rel. 03, Last sequence update) 10-OCT-2003 (Rel. 42, Last annotation update)
                                                                                      SEQUENCE
                                                                                                 Amphibian
MOD_RES
                                                                                                                                                                "Primary structure determination of a tryptophan-containing tridecapeptide from Phyllomedusa rohdei.";
                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Phyllomedusa.
                                                                                                                     PIR; A05174;
                                                                                                                                                                                                  SEQUENCE.
                                                                                                                                                                                                                                                                  Tryptophyllin-13.
Phyllomedusa rohdei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Isolation and primary structure of an a
Regul. Pept. 38:23-31(1992).
-!- FUNCTION: Smooth muscle-contracting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rana temporaria (European common frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
                                                                                                                                                                                      Montecucchi P.C.,
                                                                                                                                                                                                                       NCBI_TaxID=8394;
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Vasoactive; Pyrrolidone carboxylic
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Rana temporaria (European
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOD RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Identified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=92245104; PubMed=1574601; Shaw C., McKay D.M., Halton D.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
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                                                                                                                               . J. Pept. Protein Res. 27:175-:
SUBCELLULAR LOCATION: Secreted
TISSUE SPECIFICITY: Skin.
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QEKPY
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                                                                                      13 AA;
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                                           Conservative
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(Rel. 41, Last annotation updat
                                                                                                                        A05174.
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                                                                                              peptide; Pyrrolidone carboxylic acid.

1 PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                      Gozzini L.,
                                                                                     1646 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1569 MW;
                                                                                                                                                                                                                                                       (Rohde's leaf frog).
Chordata; Craniata; Vertebrata;
                                                    25.4%;
60.0%;
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75.0%;
                                                                                                                                                     27:175-182 (1986).
                                       Score 17; DB 1; 10
Pred. No. 3.2e+03;
Micmatches 2;
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                                                                                     CRC64;
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Hylidae;
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P80578;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=cv. Indica-IR64; TISSUE=Panicle;
Hosseini Salekdeh S.G., Bennett J.;
"Proteome analysis of rice panicle.";
Submitted (JUL-2003) to Swiss-Prot.
-!- FUNCTION: Binds to actin and affects the structure of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-OCT-2003 (Rel. 42, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Probable profilin LP04 (Fragments).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORYSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Isolation and characterization of peptides from Hydra vulgaris."; Development 122:1941-1948(1996).
                                                                                                                                                               NON_CONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=4530;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oryza sativa (Rice)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P83647;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROX ORYSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Morphogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=96232307; PubMed=8674432;
Hoffmeister S.A.H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=6087;
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Hydridae; Hydra.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hydra attenuata (Hydra) (Hydra vulgaris).
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                                                                                                                                            SEQUENCE
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                                                                                                                                                                                                                            Actin-binding; Cytoskeleton; Multigene
                                                                                                                                                                                                                                                        PROSITE;
                                                                                                                                                                                                                                                   SUBUNIT: Occurs in many kinds of cells as a actin in a 1:1 ratio.

MISCELLANEOUS: On the 2D-gel the determined protein is: 4.4, its MW is: 14.0 kDa.

SIMILARITY: Belongs to the profilin family.

SITE; PS00414; PROFILIN; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FUNCTION: Morphogenetically active
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                                                                                                                                                                                                                                                                                                                                                                                                         cytoskeleton. At high concentrations, profilin prevents the polymerization of actin, whereas it enhances it at low concentrations. By binding to PIP2, it inhibits the formation of
                                                                                                                                                                                                                                                                                                                                                                                        IP3 and DG (By similarity)
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                                            . Similarity 2; Conserv
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3; Conserv
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(Rel. 34, Last sequence update)
(Rel. 34, Last annotation update)
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                                                                      23.9%;
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                                                 3; Mismatches
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                                                                        Score 16; DB 1; pred. No. 5e+03;
                                                                                                                                            OA3022EE0E52C68B CRC64;
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                                                                                                                                                                                                                                   family
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Henry M.A., Secombes C.J.;
Purification and partial characterization of from rainbow trout, Oncorhynchus mykiss.";
Submitted (DEC-1999) to Swiss-Prot.
-!- FUNCTION: Antibacterial activity against.
-!- SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ONCMY
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Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
NCBI_TaxID=8022;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation updat
salmocidin 2A (Fragment).
                                                                                                                                                                                                                                                                     Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri). Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus. NCBI_TaxID=8022;
                                                                                                                                                                                                                                                                                                                                                                                                                                     ONCMY
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16-OCT-2001
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                                                                                                                            Henry M.A., Secombes C.J.;
"Purification and partial characterization of antibacterial peptides from rainbow trout, Oncorhynchus mykiss.";
Submitted (DEC-1999) to Swiss-Prot.
-!- FUNCTION: Antibacterial activity against Gram-negative bacteria.
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUB SPECIFICITY: Plasma serum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                 Salmocidin 2B
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16-OCT-2001 (Rel. 40, Last sequence up
                                                                                                                                                                                                                                                                                                                                                                                         P82239;
16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                      SA2B ONCMY
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                                                                                    SEQUENCE
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                                                                                                               Antibiotic.
                                                                                                                                                                                                                                 IISSUE=Serum;
                                                                                                                                                                                                                                             SEQUENCE, AND FUNCTION
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10 LLKG 13
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                                          23.9%;
                                                                                                                                                                                                                                                                                                                                                                             sequence update)
                            Score 16; DB
Pred. No. 5e+0
1; Mismatches

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                                           5e+03;
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                                                          DB 1;
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RESULT 14 ACT7_SOYBN

ACT7 SOYBN P15987;

STANDARD;

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RESULT 15
E121 LITRU STANDARL
ID E1221_LITRU STANDARL
AC P82097;
DT 28-FEB-2003 (Rel. 41, C
DT 28-FEB-2003 (Rel. 41, I
DT 10-OCT-2003 (Rel. 42, I
DE Electrin 2.1.
OS Litoria rubella (Desert
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Best Local S
Matches 2
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01-APR-1990
15-JUL-1999
Actin 7 (Frac
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                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                    Structural protein; Multigene family. NON_TER 13 13
                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR004000; Actin_like.
PROSITE; PS004406; ACTINS_1; PARTIAL.
PROSITE; PS00420; ACTINS_2; PARTIAL.
PROSITE; PS01132; ACTINS_ACT_LIKE; P)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=91346640; PubMed=2102831;
Pearson L., Meagher R.B.;
"Diverse soybean actin transcripts contain a large intron
untranslated leader: structural similarity to vertebrate m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; seurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae; Glycine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Plant Mol. Biol. 14:513-526(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=3847;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=cv.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  important role in cytoplasmic streaming, cell shape determin cell division, organelle movement and extension growth. SUBCELLULAR LOCATION: Cytoplasmic.
MISCELLANEOUS: There are at least 16 actin genes in soybean.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FUNCTION: Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY: Belongs to the actin family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FUNCTION: Essential component of cell cytoskeleton; plays an important role in cytoplasmic streaming, cell shape determination,
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2; Conserv
rubella (Desert tree frog)
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(Rel. 38, Last annotation)
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Wabnitz P.A., Bowie J.H., Tyler M.J., Wallace J.C.;
"Peptides from the skin glands of the Australian buzzing tree frog
Litori electrica. Comparison with the skin peptides from Litoria
                                                                                                                                                                                                                                                                                                                                                                                        Amphibian defense peptide; Amidation MOD_RES 13 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae; Pelodryadinae; Litoria.
                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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1 NOEQ 4
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1 NEEE 4
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                                                                                                                                                                        Similarity 2; Conserv
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6: sp_mammal:*
7: sp_mhc:*
8: sp_organell:
9: sp_phage:*
11: sp_viant:*
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sp_organelle:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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PRELIMINARY; (TrEMBLrel. 01,	32.8%; imilarity 50.0%; ; Conservative QVSPYTLL 11	T 1 QUUEE2 QPUEE2 QPUEE2; QPUEMBLrel. 13, Creat 13, Last 24, Last 25, Last 26, Last 26, Last 27, L
PRT; 13 AA., Created) , Last sequence update)	Score 22; DB 4; Length 13; Pred. No. 3e+03; 1; Mismatches 3; Indels	NARY; PRT; 13 AA. rel. 13, Created) rel. 13, Last sequence update) rel. 13, Last annotation update) factor (Fragment). Chordata; Craniata; Vertebrata; Euteleostomi; Chordata; Catarrhini; Hominidae; Homo. Nojima T., Yoshida M.C., Abe S.; on the breakpoint region of a t(11:22) ing's sarcoma."; to the EMBL/GenBank/DDBJ databases. 11 13 13 14 1541 MW; 2C677798CB566AB7 CRC64;
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EMBL;
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Soong B.W., Lu F.M., Chak K.F.;
"Characterization of the cea gene of the cea
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Enterobacteriaceae; Eschei
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CEIE7.
                                                                                                                  Q14890
                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=20193983; PubMed=10727835; Thiaucourt F., Lorenzon S., David A., Breard A.; "Phylogeny of the Mycoplasma mycoides cluster as of a putative membrane protein gene."; vet. Microbiol. 72:251-268(2000).
EMBL; AF162995; AAF15247.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hypothetical protein (Fragment).
Mycoplasma capricolum subsp. capricolum.
Bacteria; Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma.
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01-OCT-2003
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01-MAY-2000
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erPro; IPR000290; Colicin_pyocin.
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Q48357;
Q1-NOV-1996
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
NCBI_TaxID=9606;
[1]
                                                                                Q50476;
01-NOV-1996
01-NOV-1996
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Opperman T., Martinez A., Richardson J.P.;
"The ts15 mutation of Escherichia coli alters
terminal nine residues of Rho protein.";
Gene 152:133-1341295).
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        Mycobacterium tuberculosis.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Mycobacteriaceae; Mycobacterium.
NCBI_TaxID=1773;
                                                                                                                                                                                                                                                                                                                                                                                                                         Bacteria; Proteobacteria;
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01-MAR-2001
01-MAR-2001
01-MAR-2001
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"Rapid Identification of a point mutation of the Mycobacterium tuberculosis catalase-peroxidase (katG) gene associated with is resistance.";
Submitted (FEB-1994) to the EMBL/GenBank/DDBJ databases.
EMBL; U06263; AABS9976.1; -.
EMBL; U06263; AABS9976.1; -.
Popp M., Oxelman B.;
"Inferring the history of the polyploid Silene aegaea
"Inferring the history of the polyploid Silene aegaea
(Caryophyllaceae) using nuclear and chloroplast DNA seq
Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases
                                                                               Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Caryophyllales; Caryophyllaceae; Silene.
                                                                                                               RPB2.
Silene baccifera (Berry catchfly)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Candida tropicalis (Yeast).
Eukaryota; Pungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; mitosporic Saccharomycetales; Candida.
NCBI_TaxID=5482;
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SEQUENCE FROM N.A.
' Oxelman B.;
                                                                    NCBI_TaxID=54818;
                                                                                                                                           RNA polymerase II (Fragment).
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01-MAY-1999
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STRAIN=L10373;
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Spermatophyta; Magnoliophyta; euc
Caryophyllales; Caryophyllaceae;
MCBI TaxID=49735;
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Toda H., Yazawa M., Sakiyama F., Yagi K.;
Toda H., Yazawa M., Sakiyama F., Yagi K.;
"Amino acid sequence of calmodulin from wheat
J. Biochem. 115.367-367(1994).
SEQUENCE 13 AA; 1508 MW; 9763F31CD443DB1A
                                                                                                                                                                                                                                                                                                                                                                       RNA polymerase II RPB2.
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Eukaryota; Viridiplantae;
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yta; Liliopsida; Poales; Poa
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MEDLINB=82080657; PubMed=7312036;

Hudson L., Rossi J., Landy A.;

"Dual function transcripts specifying tRNA and mRNA.";

Nature 294:422-427(1981).

EMBL; X04181; CAA27777.1; -.

EMBL; X04181; CAA27777.1; -.

GO; GO:0003746; F:translation elongation factor activity;

GO; GO:0006412; P:protein biosynthesis; IEA.

Blongation factor; Protein biosynthesis.
                                                                                                                                                                                                                                               MEDLINE=20193983; PubMed=10727835; Thiaucourt F., Lorenzon S., David A., I "Phylogeny of the Mycoplasma mycoides of a putative membrane protein gene."; vet. Microbiol. 72:251-268(2000).
EMBL; AF16298; AFF15253.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein (Fragment).
Mycoplasma mycoides subsp. capri.
Bacteria; Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma.
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                                                                                                                                                                                                          Hypothetical protein.
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Q9QW45;
01-MAY-2000
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Neural cell
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O90Y46; PREMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
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MEDLINE=93054572; PubMed=1429617;

Elferink L.A., Anzai K., Scheller R.H.;

Trabl5, a novel low molecular weight GTP-binding expressed in rat brain.";
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Proc. Natl. Acad. Sci. U.S.A. 96:14430-14435(1999)
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protein RAB16 (Fragment).
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STRAIN-Balb-c; TISSUE=Liver;

MEDLINE=98250618; PubMed=9582442;

Kawahigashi H., Harada Y., Asano A., Nakamura M.;

"A cis-acting regulatory element that affects the alternative splicing of a muscle-specific exon in the mouse NCAM gene.";

Biochim. Biophys. Acta 1397:305-315(1998).

EMBL; AB001873; BAA31275.1; -.

MGD; MGI:97281; NCAM1.

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SEQUENCE 13 AA; 1496 MW; CC6098E54C72D732 CRC64;
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Mus musculus (Mouse).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

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            GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: BOUDET, ALAIN M.
APPLICANT: BOUDET, ALAIN M.
APPLICANT: SCHUCH, WOLFGANG W.
TITLE OF INVENTION: MODIFICATION OF LIGNIN SYNTHESIS
TITLE OF INVENTION: PLANTS
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
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Sequence 5, Appli	Sequence 11, Appl	Sequence 11, Appl		42,		11	<u> </u>	7	11.	<u></u> ;	7	11.	11.	11,	7, A	equence	Sequence 24, Appl

ALIGNMENTS

; OTHER INFORMATION: dansyl leucine US-09-675-922-1 SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1 OTHER INFORMATION: Description of Artificial Sequence: Factor OTHER INFORMATION: N-terminus and modified peptide from the OTHER INFORMATION: heparin-binding domain of ATIII NAME/KEY: MOD RES ORGANISM: Artificial Sequence FEATURE: 13 Similarity 7; Conserv NQEQVSP 7 NOEQVSP 53.7%; So ilarity 100.0%; 1 Conservative 0; %; Score 36; DB %; Pred. No. 1.3 0; Mismatches DB 4; 1.3; Length 13; of of Fibrin for for Tissue 0; XIIa Gaps at 0

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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTION DATA:
APPLICATION NUMBER: US/08/452,071
FILING DATE:
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION UMBER: US/08/452,071
FILING DATE:
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 07/874,166
FILING DATE: 27-APR-1992
ATTORNEY/AGENT INFORMATION:
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APPLICANT: BOUDET,
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INFORMATION FOR SEQ ID NO: 6:
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MBDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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LENGTH: 13 amino acids
TYPE: amino acid
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-861-3000
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APPLICATION NUMBER: US 07/874,166
FILING DATE: 27-APR-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: CUSHMAN, DARBY & CUSHMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: INZE, DIRK G.
APPLICANT: SCHUCH, WOLFFANG W.
TITLE OF INVENTION: MODIFICATION OF LIGNIN SYNTHESIS IN
TITLE OF INVENTION: PLANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: peptide
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                                                                                                                                                                                                                                                                                                               STREET: 1100 NEW CITY: WASHINGTON STATE: D.C.
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les 4; Conservative
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                                                                                                                                                                                                                                                                          ZIP: 20005
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Pred. No. 2.8e+02;
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; MOLECULE TYPE: US-08-620-213-3
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Patent No.
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Matches 4; Conserv
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                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 544
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE 195 10 566.4
FILING DATE: 23-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: EVANS, Joseph D.
REGISTRATION NUMBER: 26,269
REFERENCE/DOCKET NUMBER: 181/42626
TELECOMMUNICATION INFORMATION:
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INFORMATION FOR SEQ ID NO:
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LENGTH: 13 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                   TELEFAX: (202) 628-8844 INFORMATION FOR SEQ ID NO:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-861-3000
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/620,213
FILING DATE:
GIRCUITE STATE:
FILING DATE:
FILING DA
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ADDRESSEE: Evenson, McKeown, Edwards & Lenahan STREET: 1200 G Street, N.W., Suite 700
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TITLE OF INVENTION: BENZAZEPINE-, BENZOXAZEPINE- AND
TITLE OF INVENTION: BENZOTHIAZEPINE-N-ACETIC ACID DERIVATIVES, PROCESS FOR THEIR
TITLE OF INVENTION: PREPARATION AND PHARMACEUTICAL COMPOSITIONS CONTAINING THEM
                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
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CITY: Washington
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                                                                                                      TYPE: amino aci
STRANDEDNESS: s
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                                                                           TOPOLOGY:
                                                                                                                                                                                  LENGTH:
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                                                                               linear
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                                     peptide
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Pred. No. 2.
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HOGARTH, Mark P.

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RESULT 6
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          Sequence 69, Application US/08332562A Patent No. 5985599
GENERAL INFORMATION:
                                                                                                                                                                              Matches
                                                                                                                                                                                          Query Match
Best Local
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Best Local
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APPLICANT: Ravetch, Jeffrey V.
APPLICANT: Kurosaki, Tomohiro
                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 42:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 664-0525
TELEY: 422523 COOP UI
INFORMATION FOR SEQ ID NO: 1:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 08/05
FILING DATE: 23-APR-1993
ATTORNEY/AGENT INFORMATION:
NAME: White, John J.
REGISTRATION NUMBER: 28,678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 514
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/052,269
APPLICANT:
                                                                                                                                                                                                                                                    ANTI-SENSE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                             LENGTH: 13 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                         Local Similarity
ses 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
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MCKENZIE,
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NO
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62.5%;
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METHOD FOR SCREENING FOR TARGETS FOR
ANTI-INFLAMMATORY OR ANTI-ALLERGIC AGENTS
Ian F.C.
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                                                                                                                                                                                          Score 23; DB 2;
Pred. No. 4.3e+02
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Pred. No. 4.3e+02;
                                                                                                                                                                            Mismatches
                                                                                                                                                                                          4.3e+02
                                                                                                                                                                           4; Indels
                                                                                                                                                                                                       Length 13;
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                                                                                                                                                                                                                                                                                                 Patent No. 5470753
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                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Sepecov, Nikolai
APPLICANT: Lesakova, Olga
APPLICANT: Krchnak, Viktor
APPLICANT: Lebl, Michal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 904136
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/896
PILING DATE: 27-MAY-1992
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,769
REFERENCE/DOCKET NUMBER: 5427
TELECOMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEPHONE: (202)672-5399
COUNTRY: USA
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                       TITLE OF INVENTION: PEPTIDE SEQU
TITLE OF INVENTION: SPECTROMETRY
NUMBER OF SEQUENCES: 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/896,457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
COMPUTER: IBM PC com
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APPLICANT:
APPLICANT:
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                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: HULETT, Mark D.
TITLE OF INVENTION: FC RECEPTOR FOR IMMUNOGLOBULIN
NUMBER OF SEQUENCES: 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                   ADDRESSEE: Pennic
STREET: 1155 Aver
CITY: New York
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 13 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 3000 K St
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 31-OCT
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                                                                                                                     E: Pennie & Edmonds
1155 Avenue of the Americas
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3000 K Street, N.W., Suite 500
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                                                                                                                                                                                                        PEPTIDE SEQUENCING USING MASS
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Pred. No. 4.3e+02;
1; Mismatches 4
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Query Match
Best Local Similarity
Matches 3; Conserv:
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TELEFAX: 212-0...
TELEFAX: 26141 PENNIE
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: !
SEQUENCE CHARACTERISTICS:
LEUGTH: 13 amino acids
TYPE: AMINO ACID
TYPE: AMINO HURNOWN
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
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FILING DATE: 19930528
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Misrock Egg., 5. Leslie
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 7156-040-999
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-999
TELEPHONE: 212-790-999
TELEPAX: 212-869-8864/9741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: AMINO ACID STRANDENESS: 1177.
TOPOLOGY:
OLFO
                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: Misrock Esq., S. Leslie
REGISTRATION NUMBER: 18,72
REFERENCE/DOCKET NUMBER: 7156-040-999
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-869-8864/9741
                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Krchnak, Viktor
APPLICANT: Leb1, Michal
TITLE OF INVENTION: PEPTIDE SEQUENCING USING MASS
TITLE OF INVENTION: SPECTROMETRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 19930: CLASSIFICATION: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: PC-DOS/MS-DOS
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Krchnak, Viktor
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Pred. No. 6.7e+0;
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US-08-750-419A-22
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                                                                  Matches
                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 1614-175
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 205-8000
TELEPAX: (703) 205-8050
INFORMATION FOR SEQ ID NO: 22:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 22040-0747
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: PU DU...
CITY: FALLS CHURCH
STATE: VA
                                                                                                                                                   TOPOLOGY: li
                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: MURPHY JR, GERALD M
REGISTRATION NUMBER: 28,9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: BIRCH, ST
STREET: PO BOX 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: SUSANI, MARKUS
APPLICANT: KRAFT, DIETRICH
APPLICANT: LAFFER, SYLVIA
APPLICANT: LAFFER, SYLVIA
TITLE OF INVENTION: RECOMBINANT ALLERGEN, FRAGMENTS THEREOF,
TITLE OF INVENTION: CORRESPONDING RECOMBINANT DNA MOLECULES, VECTORS AND HOSTS
TITLE OF INVENTION: CONTAINING THE DNA MOLECULES, DIACNOSTIC AND THERAPEUTIC
TITLE OF INVENTION: USES OF SAID ALLERGENS AND FRAGMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP:
                                                                                                                                                                                      TYPE: amino acid
STRANDEDNESS: not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: unknown
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                                3 EQVSPY 8
                                                                  3; Conservative
EPIAPY 6
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SPERR, WOLFGANG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BALL, TANJA
                                                                                                                                                                       linear
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                                                                                  32.8%;
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                                                                  2;
                                                                                  Score 22; DB 3;
Pred. No. 6.7e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 22; DB 1; 1
Pred. No. 6.7e+02;
2; Mismatches 1
                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 13
                                                                                                   Length 13
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                                                                    Gaps
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RESULT 10 US-09-468-578-11

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US-09-811-672-19
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                                                                                                                     GENERAL INFORMATION:
                                                                                                                                        Sequence 19, App
Patent No. 65591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 17
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 11
LENGTH: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: UNILEVER N.V. et al.
TITLE OF INVENTION: DETERGENT COMPOSITIONS COMPRISING PHENOL OXIDIZING
TITLE OF INVENTION: DETERGENT COMPOSITIONS COMPRISING PHENOL OXIDIZING
TITLE OF INVENTION: DETERMENT COMPOSITIONS COMPRISING PHENOL OXIDIZING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 4; Conserv
                                                                                                                                                                                                                                                                                                                                      Query Match 32.8%;
Best Local Similarity 80.0%;
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 11, Application US/09868839 Patent No. 6509307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
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    APPLICANT:
                                                         APPLICANT: BALL, APPLICANT: VRTA APPLICANT: SPER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/468,578
CURRENT FILING DATE: 1999-12-21
PRIOR PPLICATION NUMBER: US 09/220,871
PRIOR FILING DATE: 1998-12-23
PRIOR APPLICATION NUMBER: US 09/338,723
PRIOR APPLICATION NUMBER: US 09/338,723
PRIOR FILING DATE: 1999-06-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/868,839
CURRENT FILING DATE: 2001-06-12
PRIOR APPLICATION NUMBER: US 09/220,871
PRIOR FILING DATE: 1998-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 09/338,723 PRIOR FILING DATE: 1999-06-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Bodie, Eliza
TITLE OF INVENTION: Phe
FILE REFERENCE: GC561-3
                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: C7516(V)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
                                                                                                                                                                                                                                                            3 QVMPY 7
                                                                                                                                                                                                                                                                                                   4 QVSPY 8
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VRTALA, Susanne
SPERR, Wolfgang
VALENT, Peter
SUSANI, Markus
KRAFT, Dietrich
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Bodie, Elizabeth A.
Bodie, Phenol Oxidizing Enzymes
                                                                                                                                                           Application US/09811672
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Pred. No. 6.7e+02;
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Pred. No. 6.7e+02;
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; MOLECULE TYPE: US-08-068-947-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Sepetov
APPLICANT: Lssakov
APPLICANT: Krchnak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT FILING DATE: 2001-03-20
NUMBER OF SEQ ID NOS: 28
SOFTWARE: PatentIn version 3.1
SEQ ID NO 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19, Application US/08068947 Patent No. 5470753
Query Match
Best Local Similarity
Matches 3; Conserv
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TELEPAX: 212-869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: VALENTA, Rudolf
APPLICANT: LAFFER, Sylvia
TITLE OF INVENTION: RECOMBLNANT ALLERGEN,
TITLE OF INVENTION: MOLECULES, VECTORS AT
TITLE OF INVENTION: THERAPEUTIC USES OF EPILE REFERENCE: 1614-0247P
CURRENT APPLICATION NUMBER: US/09/811,672
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ORGANISM: Timothy Grass
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NAME: MISTOCK ESQ., S. Lesl:
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 711
                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 212-790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie &
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: PEPTIDE SEQU
                                                                                                                                                                                                                                                                                                                                                                                                                                        COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Palaring
                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US
FILING DATE: 19930528
CLASSIFICATION: 436
                                                                                                             TOPOLOGY: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: New York
STATE: New York
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                                                                                                                                                TYPE: AMINO ACID
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INVENTION: RECOMBINANT ALLERGEN, FRAGMENTS THEREOF, CORRESPONDING RECOMBINAN
INVENTION: MOLECULES, VECTORS AND HOSTS CONTAINING THE DNA MOLECULES, DIAGN
INVENTION: MOLECULES, VECTORS AND HOSTS CONTAINING THE DNA MOLECULES, DIAGN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 EPIAPY 6
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1155 Avenue of the Americas
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Krchnak, Viktor
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                 31.3%;
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Score 21; DB 1; L
Pred. No. 1.1e+03;
2; Mismatches 2;
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Pred. No. 6.7e+02;
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                                      Length 13;
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RESULT 14 US-09-040-216-8

Application US/09040216

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NOEQVSP

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CURRENT APPLICATION NUMBER: US/09/040,216
CURRENT FILING DATE: 1998-03-17
EARLIER APPLICATION NUMBER: 08/919,748
EARLIER FILING DATE: 1997-08-28
EARLIER APPLICATION NUMBER: 60/025,146
EARLIER APPLICATION NUMBER: 60/025,146
EARLIER FILING DATE: 1996-08-30
NUMBER OF SEQ ID NOS: 61
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 8
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US-08-068-947-21
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            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/068,947
FILING DATE: 1930528
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Misrock Esq., S. Leslie
REGISTRATION NUMBER: 18,872
FREGISTRATION NUMBER: 18,872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21, Application US/08068947 Patent No. 5470753
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APPLICANT: COOPERNAM, ET AL., BARRY
APPLICANT: COOPERNAM, ET AL., BARRY
TITLE OF INVENTION: PEPTIDES, PEPTIDE ANALOGS, PEPTIDOMIMETICS, AND OTHER
TITLE OF INVENTION: SMALL MOLECULES USEFUL FOR INHIBITING THE ACTIVITY OF
TITLE OF INVENTION: RIBONUCLECTIDE REDUCTASE
FILE REFERENCE: 9596-63U1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Sepetov, Nikolai
APPLICANT: Lessakova, Olga
APPLICANT: Krchnak, Viktor
APPLICANT: Lebl, Michal
TITLE OF INVENTION: PEPTIDE SEQUENCING USING MASS
TITLE OF INVENTION: SPECTROMETRY
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT ORGANISM: Escherichia coli FEATURE:
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REFERENCE/DOCKET NUMBER: 7156-040-999
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1155 Avenue of the Americas
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; TYPE: AMINO ACID
; STRANDEDNESS: unknowr
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
US-08-068-947-21
Search completed: October 1, Job time: 18 secs
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                                                                                                                                    Query Match 29.9%;
Best Local Similarity 60.0%;
Matches 3; Conservative
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TELEPHONE: 212-790-9090
TELEFAX: 212-869-8864/9741
                                                                                                                                                                                                                                                                                         LENGTH:
                                                                   9 QVTPF 13
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Pred. No. 1.6e+03;
2; Mismatches 0; Indels
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Maximum Match
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Maximum DB
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      1351062 seqs, 321799191 residues
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/ cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
/ cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
/ cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
/ cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
/ cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
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Copyright (c) 1993 - 2004 Compugen Ltd
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US-09-932-613-156

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US-10-361-208-197

US-10-226-007-792

US-10-226-007-805

US-10-226-007-815

US-10-226-007-815

US-10-226-007-824

US-10-226-007-832

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US-09-811-672-19
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Sequence 7, Appli
Sequence 19, Appli
Sequence 8, Appli
                                              Sequence 22, Appl
Sequence 156, App
Sequence 156, App
Sequence 64, Appl
Sequence 782, App
Sequence 794, App
Sequence 805, App
Sequence 815, App
Sequence 824, App
Sequence 824, App
Sequence 827, App
Sequence 827, App
Sequence 32, App
Sequence 30, Appl
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9	16	15	15	14	14	14	14	14	14	<u>1</u> 4	14	14	14	14	14	14	10	16	15	14	14	14	14	14	13	12	10	10	9
895-072-5	-10-652-40	-10-285-394-	-10-298-461-1	-10-224-999A-179	-10-224-999A-	-224-999A-178	0-224-999A-178	9	US-10-024-197-23	26-007-106	26-007-105	-10-226-007-104	-10-226-007-1	-10-226-007-101	4-943-5	-10-104-	9-993-180-1	US-10-311-509-19	-10-285-	-10-161-660-2	-10-153-244-	-10-153-244-1	-10-153-244-	US-10-153-244-78	0-080-210-	US-09-791-377-594	-09-791-389-15	US-09-791-393-156	US-09-791-378-594
52, 1	e 8,	e 129, <i>‡</i>	e 14, Ap	e 1790,	Sequence 1789, Ap	e 1788,	e 1787,	e 1786,	e 23, Ag	e 106	e 1055,	e 1042,	e 1029,	1016	57,	Sequence 12, Appl	e 13,	e 19,	e 162,	e 22, 1	æ	e 191	e 141	Sequence 78, Appl	e 11,	ce 594	ce 156, Ap	Sequence 156, App	-

ALIGNMENTS

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APPLICANT: Hubbell, Jeffrey A
APPLICANT: Schense, Jason C
APPLICANT: Schense, Jason C
APPLICANT: Saklyama-Elbert, Shelly E
TITLE OF INVENTION: Growth Factor Modified Pro
TITLE OF INVENTION: Engineering
FILE REFERENCE: ETH 107 CIP (2)
CURRENT APPLICATION NUMBER: US/10/323,046
CURRENT FILING DATE: 2002-12-17
PRIOR APPLICATION NUMBER: 09/141,153
PRIOR FILING DATE: 1998-08-27
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 3.1
SEQ ID NO 22
LENGTH: 13
엉덩
                                                                                                                                    ; NAME/KEY: MOD_RES
; LOCATION: (1)
; OTHER INFORMATION: dansyl Leucine
US-10-323-046-22
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                                                                    Matches
                                                                                Query Match
Best Local 9
                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                         OTHER INFORMATION:
 N
                                                                  Similarity 7; Conserv
NQEQVSP 8
                         NQEQVSP 7
                                                                    Conservative
                                                                                                                                                                                                                         Description of Artificial Sequence: Peptide
                                                           53.7%; 50.
100.0%; Pro
                                                                  Score 36; DB; Pred. No. 7.1
0; Mismatches
                                                                                  DB 1.7.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protein Matrices for Tissue
                                                                                                 14;
                                                                    0
                                                                                                  Length 13;
                                                                    Indels
                                                                    0
                                                                    Gaps
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APPLICANT: Fleming, Tony J.

APPLICANT: Fleming, Tony J.

APPLICANT: Ladner, Robert Charles

TITLE OF INVENTION: BINDING POLYPEPTIDES FOR B LYMPHOCYTE STIMULATOR PROTEIN (BLyS)

FILE REFERENCE: Dyx-018.1 PCT; DYX-018.1 US

CURRENT APPLICATION NUMBER: US/09/932,322

CURRENT FILING DATE: 2001-08-17

NUMBER OF SEQ ID NOS: 458

SOFTWARE: Patentin version 3.1

SEQ ID NO 156

LENGTH: T
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Best Local Similarity
Thehes 6; Conserve
                                                                                               RESULT 4
US-10-361-208-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; FEATURE:
; OTHER INFORMATION: BLyS binding polypeptide
US-09-932-613-156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-932-322-156; Application US/09932322; Sequence 156, Application US/09932322; Publication No. US20030194743A1
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                                     Sequence 64, Application US/10361208 Publication No. US20040009167A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Fleming, Tony J.

APPLICANT: Rosen, Craig A.

APPLICANT: Rosen, Craig A.

TITLE OF INVENTION: BIDDING POLYPEPTIDES AND METHODS BASED THEREON
FILE REFERENCE: Dyx-025.1 PCT; DYX-025.1 US
CURRENT APPLICATION NUMBER: US/09/932,613
CURRENT FILING DATE: 2001-08-17
NUMBER OF SEQ ID NOS: 458
SOFTWARE: Patentin version 3.1

EQ ID NO 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 156, Application US/09932613
Publication No. US20030091565A1
GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
APPLICANT: Beltzer, James P.
APPLICANT: Potter, M. Daniel
                                                                                                                                                                                                                                                                               Query Match
Best Local &
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APPLICANT: Rider, Todd H.
TITLE OF INVENTION: ANTI-PATHOGEN TREATMENTS
                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: BLyS binding polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
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Pred. No. 1.3e+03;
0; Mismatches 3
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Pred. No. 1.3e+03;
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RESULT 5
US-10-361-208-197
; Sequence 197, A
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CURRENT APPLICATION NUMBER: US/10/361,208
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,359
PRIOR APPLICATION NUMBER: US 60/355,059
PRIOR FILING DATE: 2002-02-07
PRIOR FILING DATE: 2002-12-10
NUMBER OF SEQ ID NOS: 473
SOFTWARE: FastSEQ for Windows Version 4.0
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LENGTH: 13
TYPE: PRT
ORGANISM: unknown
FEATURE:
                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 473
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Publication No. US20040009167A1 GENERAL INFORMATION:
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Matches 5; Conser
                                                                                                          Query Match
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                                                                        Matches
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PRIOR FILING DATE: 2002-02-07
PRIOR APPLICATION NUMBER: US 60/355,022
PRIOR FILING DATE: 2002-02-07
PRIOR APPLICATION NUMBER: US 60/432,386
PRIOR FILING DATE: 2002-12-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/361,208 CURRENT FILING DATE: 2003-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: ANTI-PATHOGEN TREATMENTS FILE REFERENCE: 0050.2041-003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Rider,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE: NON_CONS LOCATION: 7-8
                                                                                                                                                                 FEATURE: NON_CONS
LOCATION: 7-8
                                                                                                                                                                                                                        OTHER INFORMATION: partial Hdj-1 sequence
                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: unknown
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: partial Hdj-1 sequence
                                                                                                                                                                                                                                                                                                     ENGTH
                                                                       Local Similarity tes 5; Conserv
                                 2 QEQVSP 7
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QEQVLP 12
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                                                                        Conservative
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                                                                                        35.8%;
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Pred: No. 1.3e+03;
0; Mismatches 1
                                                                       Score 24; DB 15; Length 13; Pred. No. 1.3e+03; O; Mismatches 1; Indels
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RESULT 6 US-10-26-007-782 ; Sequence 782, Application US/10226007 ; Publication No. US20030105277A1

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Best Local Similarity
Matches 4; Conserve
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                                                                                                                                                                                                                                 RESULT 8
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US-10-226-007-782
                                            Sequence 805, Application US/10226007
Publication No. US20030105277A1
GENERRAL INFORMATION:
APPLICANT: Myriad Genetics, Inc.
APPLICANT: Morham, Scott
APPLICANT: Cavitz, Kenton
APPLICANT: Hobden, Adrian
TITLE OF INVENTION: Compositions and Therapeutic Methods for Viral Infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/313,883
PRIOR FILING DATE: 2001-08-21
NUMBER OF SEQ ID NOS: 1673
SOFTWARE: PatentIn version 3.1
SEQ ID NO 794
LENGTH: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/313,883
PRIOR FILING DATE: 2001-08-21
NUMBER OF SEQ ID NOS: 1673
SOFTWARE: PatentIn version 3.1
SEQ ID NO 782
LENGTH: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Publication No. US20 GENERAL INFORMATION:
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Best Local Similarity
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-10-226-007-794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Myriad Genetics, Inc.
APPLICANT: Morham, Scott
APPLICANT: Zavitz, Kenton
APPLICANT: Hobden, Adrian
TITLE OF INVENTION: Compositions and Therapeutic Methods for Viral Infection
FILE REFERENCE: 5005.01
CURRENT FILING DATE: 2002-11-15
CURRENT FILING DATE: 2002-11-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
FILE REFERENCE: 5005.01
CURRENT APPLICATION NUMBER: US/10/226,007
CURRENT FILING DATE: 2002-11-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 5005.01
CURRENT APPLICATION NUMBER: US/10/226,007
CURRENT FILING DATE: 2002-11-15
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APPLICANT: Hobden, Adrian
TITLE OF TOTAL Compositions and Therapeutic Methods for Viral Infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Myriad Genetics,
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Pred. No. 2e+03;
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US-10-226-007-815
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; ORGANISM: Human herpesvirus 
US-10-226-007-824
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; SEQ ID NO 815
; LENGTH: 13
; TYPE: PRT
                                                                        APPLICANT: Myriad Genetics, Inc.
APPLICANT: Morham, Scott
APPLICANT: Zavitz, Kenton
APPLICANT: Edoten, Adrian
APPLICANT: Hobden, Adrian
TITLE OF INVENTION: Compositions and Therapeutic Methods for Viral Infection
FILE REFERENCE: 5005.01
CURRENT APPLICATION NUMBER: US/10/226,007
CURRENT FILING DATE: 2002-11-15
PRIOR APPLICATION NUMBER: US 60/313,883
PRIOR APPLICATION NUMBER: US 60/313,883
PRIOR FILING DATE: 2001-08-21
NUMBER OF SEQ ID NOS: 1673
SOFTWARE: Patentin version 3.1
SEQ ID NO 824
                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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Publication No. US20030105277A1
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CURRENT APPLICATION NUMBER: US/10/226,007
CURRENT FILING DATE: 2002-11-15
PRIOR APPLICATION NUMBER: US 60/313,883
PRIOR FILING DATE: 2001-08-21
NUMBER OF SEQ ID NOS: 1673
                                     LENGTH: 13
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Myriad Genetics, Inc.
APPLICANT: Morham, Scott
APPLICANT: Zavitz, Kenton
APPLICANT: Hobden, Adrian
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PRIOR FILING DATE: 2001-08-21
NUMBER OF SEQ ID NOS: 1673
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Morham, Scott
APPLICANT: Zavitz, Kenton
APPLICANT: Hobden, Adrian
TITLE OF INVENTION: Compositions and Therapeutic Methods for Viral Infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Human herpesvirus 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 1:
TYPE: PRT
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Pred. No. 2e+03;
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RESULT 12
US-10-412-897-20
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; ORGANISM: Human herpesvirus 4
US-10-226-007-832
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US-10-226-007-832
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                                                                                                                             ; TYPE: PRT; ORGANISM: Homo sapiens
US-10-412-897-20
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Publication No. US20030220224A1
GENERAL INFORMATION:
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Best Local Similarity
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Best Local
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Matches 5; Conserv
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                                                                                                                                                                                               SEQ ID NO 20
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TITLE OF INVENTION: Compositions and Therapeutic Methods for Viral Infection
FILE REFERENCE: 5005.01
CURRENT APPLICATION NUMBER: US/10/226,007
CURRENT FILING DATE: 2002-11-15
PRIOR FILING DATE: 2001-08-21
PRIOR FILING DATE: 2001-08-21
RUMBER OF SEQ ID NOS: 1673
                                                                                                                                                                                                         APPLICATT: Bristol Myers Squibb Company
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES ENCODING THE HUMAN CITRON KINASE
TITLE OF INVENTION: POLYPEPTIDE, BMSNKC_0020/0021
FILE REFERENCE: DO193 NP
CURRENT APPLICATION NUMBER: US/10/412,897
CURRENT FILING DATE: 2003-04-11
PRIOR FILING DATE: 2003-04-12
NUMBER OF SEQ ID NOS: 77
SOFTWARE: Patentin version 3.2
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QEQVS
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Zavitz, Kenton
Hobden, Adrian
                                QEQVS 6
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                                                                               34.3%; Score 23; DB 15; Length 13; 100.0%; Pred. No. 2e+03;
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1; Mismatches
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Pred. No. 2e+03;
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RESULT 13

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APPLICANT: VALENTA, Rudolf
APPLICANT: LAFFER, Sylvia
APPLICANT: LAFFER, Sylvia
TITLE OF INVENTION: RECOMBINANT ALLERGEN, FRAGMENTS THEREOF, CORRESPONDING RECOMBINANT
TITLE OF INVENTION: MOLECULES, VECTORS AND HOSTS CONTAINING THE DNA MOLECULES, DIAGNO
TITLE OF INVENTION: THERAPEUTIC USES OF SAID ALLERGENS AND FRAGMENTS
FILE REFERENCE: 1614-0247P
CURRENT APPLICATION NUMBER: US/09/811,672
CURRENT APPLICATION SIMPLE SOLUTION OF SEQ 1D NOS: 28
SOFTWARE: Patentin version 3.1
SEQ ID NO 19
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; GENERAL INFORMATION:
; APPLICANT: WAITHET-LAMBERT
; TRITLE OF INVENTION: IDENTIFICATION OF A CAPACITATIVE CALCIUM
; TITLE OF INVENTION: CHANNEL IN ANTIGEN PRESENTING CELLS AND USES THEREOF
; FILE REFERENCE: Mlsn1(310800)
                                                                                                                                        US-09-946-175-8
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                                                                                             ; Sequence 8, Application US/09946175; Patent No. US20020106671A1
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CURRENT FILING DATE: 1999-06-23
PRIOR APPLICATION NUMBER: 09/220,871
PRIOR FILING DATE: 1998-12-23
NUMBER OF SEQ ID NOS: 11
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 7
LENGTH: 13
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APPLICANT: Huaming, Wang
TITLE OF INVENTION: Phenol Oxidizing Enzymes
FILE REFERENCE: GC561-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19, Application US/09811672
Patent No. US20020052490A1
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Best Local
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Best Local Similarity
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APPLICANT:
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APPLICANT: VRTALA, Susanne
APPLICANT: SPERR, Wolfgang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 13
TYPE: PRT
ORGANISM: Timothy Grass
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                                                                                                                                                                                                                                                                                                                   Similarity
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SUSANI, Markus
KRAFT, Dietrich
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Pred. No. 3.2e+03;
2; Mismatches 1
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Pred. No. 3.2e+03;
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CURRENT APPLICATION NUMBER: US/09/946,175
CURRENT FILING DATE: 2001-09-05
NUMBER OF SEQ ID NOS: 49
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 8
LENGTH: 13
TYPE: PRT
US-09-946-175-8
Query Match
Best Local Similarity 33.3%; Pred. No. 3.2e+03;
Matches 3; Conservative 3; Mismatches 3; Indels 0; Gaps 0;
Matches 3; Conservative 3; Mismatches 3; Indels 0; Gaps 0;
Search completed: October 1, 2004, 13:49:24
Job time: 46 secs
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Minimum DB
Maximum DB
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Perfect score:
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Listing first
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NQEQVSPYTLLKG 13
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GenCore version (c) 1993 - 2004
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Aay679317 Factor II
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45	44	43	42	41	40	39	38	37	36	3 5	34	33	32	31	30	29	28	27	26
22	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23
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Peptide	Aae17225 Peptide c	Aao18215 S chartar	Aau15709 Schizophr	Aau26269 Depressio	Aau25365 Schizophr	Aau28621 DPI trypt	Abb56293 Vascular	Aay95542 Stachybot	Aay96766 S. charta	Aay45224 Stachybot	Aaw06274 ITIM moti	Ada51566 Human her	Ada51583 Human her	Ada51556 Human her	Ada51533 Human her	Ada51545 Human her	Ada51575 Human her	Abb97728 Human pro	Aam53255 Human non

ALIGNMENTS

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RESULT 1
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Modified-site
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terminal Gly to form a cyclic peptide"
5. .13
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terminal Asn to form a cyclic peptide"
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ABJ00698 ABG33559 ABB97726 ABB97727 AAR49912 AAR49915 AAR49913

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Aar83958 Aar60824

FcgammaRI ITIM moti

This sequence represents an alpha-2 antiplasmin derived peptide. Alpha-2 antiplasmin is a substrate for the fibrin stabilising enzyme Factor XIIIa. Synthetic analogues of lysine and glutamine labelled with a

and glutamine

antiplasmin is a substrate for the fixIIIa. Synthetic analogues of lysine

AAR83958 AAW06266 AAR60824 AAY67844 AAM50298 ABG73917

AAY20946 AAY20420 AAR54972 AAW38008 AAE23145 AAR34779

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RESULT 2
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                                                                                                                                                                                                     Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Page 16; 46pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel synthetic analogues for diagnosis of thrombosis, atherosclerosis, inflammation or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-126380/11.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alpha-2 antiplasmin; fibrin stabilising enzyme; Factor XIIIa; cancer; embolism; thrombosis; inflammation; atherosclerosis; diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alpha-2 antiplasmin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY67837 standard; peptide; 13
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                                                                                                  l Similarity
12; Conserv
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  NQQQVSPYTLLKG 13
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                                                                                                  Conservative
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                                                                                             Score 64; DB 3; Le
Pred. No. 4.3e-05;
l; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
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Synthetic
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Pred. No. 0.00016;
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RESULT 5
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                                                                                                        embolism;
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                                                                                                        thrombosis; inflammation; atherosclerosis; diagnosis.
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                                                                                                                                                                                                                                                Alpha-2 antiplasmin; fibrin stabilising enzyme; Factor XIIIa; cancer; embolism; thrombosis; inflammation; atherosclerosis; diagnosis.
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Novel synthetic analogues for diagnosis of thrombosis, atherosclerosis, inflammation or cancer.
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92.3%;
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Best Local
                                                                                                   Matches
                                                                                                                                                                                                                                             The present sequence is that of a fluorescent synthetic peptide, which has a Factor XIIIa substrate at the N-terminal end and a polylysine moiety at the C-terminus. The peptide is used to produce a heparin-peptide chimera by coupling to a heparin oligosaccharide, with a unique aldehyde group on one end, via reductive amination. A matrix is formed in which heparin is used to incorporate heparin-binding growth factors for use in tissue repair, regeneration, remodeling, and/or drug delivery. The invention provides biocompatible and biodegradable matrices incorporating bioactive proteins such as growth factors. The matrices can be formed in vitro or in vivo at the site of implantation, and provide controlled and/or sustained release of the bioactive protein
                                                                                                                                                                                                       Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-041479/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hubbell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-2000; 2000WO-US011947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-NOV-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tissue
Factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       regeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200183522-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAM50298;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-FEB-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BIDG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  growth factor modified protein matrix useful for tissue repair, eration and/or remodeling, and/or drug delivery.
N
                                                                                              7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            engineering; tissue repair; tissue regeneration;
XIIIa; heparin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             XIIIa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EIDGENOESSISCHE TECH HOCHSCHULE ZUERICH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HUBBELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page
                                                                                                                                                                                                       ΑA;
                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US011947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Schense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       substrate-polylysine peptide chimera.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51pp; English.
                                                                                                                      53.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Factor XIIIa substrate"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "heparin-binding peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sakiyama-Elbert
                                                                                              0;
                                                                                              Score 36; DB Pred. No. 8.2 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       leucine, allows detection
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                                                                                                                      DB 5;
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                                                                                                                                               Length 13;
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                                                                                           Gaps
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RESULT 9 ABG73917 ID ABG7

ABG73917 standard; peptide; 13

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                                                                                                                                                The invention relates to a matrix comprising fibrin, a peptide which cc comprises a first domain comprising a Factor XIII a substrate and a cc second domain comprising heparin or a heparin-like compound coupled to the first domain, and a heparin binding protein (HBP), where the peptide is used for controlled release of HBP, for enhanced wound healing in covarious tissues including vasculature, skin, nerve and liver. Heparin cused in the matrix protects the growth factors from proteolytic matrix. Despite their relatively strong affinity for heparin, heparin cc binding growth factors dissociate from the matrix on a short time scale. Therefore, high excess of binding sites is essential to ensure that they do not diffuse far before they bind to the matrix again. This equilibrium creeptors that are in close proximity to the street of dissociation. This creeptors that are in close proximity to the street of dissociation. This creeptors that are in close proximity to the street of dissociation. This creeptors that they did release provides both relatively long term binding compressed the factors of growth factors and rapid release of growth factors to local cells. The present sequence is a peptide used to make the matrix of the invention
                                                             Matches
                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Factor XIIIa; fibrin matrix; heparin; heparin binding protein; HBP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel matrix for controlled delivery of heparin binding protein has fibrin, peptide having first domain with Factor XIIIa substrate and second domain with heparin/heparin-like compound, and heparin binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US6468731-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   wound healing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Factor IIIa cleavage site-containing peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-MAR-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hubbell JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYZU-)
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                                                                                                                        Sequence
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                                                                          Local
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 N
                                                            Similarity 7; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EIDGENOESSISCHE TECH HOCHSCHULE ZUERICH
                                                                                                                                                                                                                                                                                                                                                                                                                                                         2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Col 6; 17pp;
                                                                                                                          AA;
                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Schense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   vasculature; skin; nerve; liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-00141153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fluorescence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /label= OTHER
/note= "Dansyl-leucine, used to allow detection by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                       53.7%; bu
100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sakiyama SE;
                                                             score 36; DB; Pred. No. 8.2 0; Mismatches
                                                                              DB 6
                                                                                           6
                                                               0;
                                                                                            Length 13
                                                                 Indels
                                                               o
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                                                                 Gaps
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RESULT 10 AAY20946 ID AAY20

AAY20946 standard; protein; 13

Дb Ş

4

RREMSPYSL 12 QEQVSPYTL 10

0

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CC disease, Down's syndrome, myotonic dystrophy, Huntington's disease, Comultiple sclerosis, alcoholic liver disease, diabetes mellitus type II CC and many others listed) or susceptibility to these disorders. The method CC allows a definitive diagnosis of Alzheimer's disease in living patients, CC at an early stage. It is based on the observation that disease may be CC caused by mutations in RNA rather than DNA. The invention describes the CC caused by mutations in RNA molecules, specifically proteins including CC beta-amyloid precursor protein (beta-ARP), the microtubule associated CC proteins Tau and Big Tau, ubiquitin B, apolipoprotein E, microtubule associated CC associated protein 2 (MAP2), neurofilament-I, neurofilament-I, neurofilament-I, ccllulary acidic CC protein (GFAP), the cellular tumour antigen p53, B-cell leukemia/lymphoma CC (bcl-2) proto-oncogene, semaphorin III, HUPF-1, high mobility group CC protein-C (HMGP-C) and neuroendocrine specific protein A
                              Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    frameshift mutation; age-related disease; neurodegenerative disorder; Alzheimer's disease; Down's syndrome; myotonic dystrophy; neuronal; Huntington's disease; multiple sclerosis; alcoholic liver disease; diabetes mellitus type II; microtubule associated protein; Tau; Big Tau ubiquitin B; apolipoprotein E; MAP2; neurofilament-L; neurofilament-M; neurofilament-F; presentilin II; cellular tumour antigen; glial fibrillary acidic protein; GFAP; p53; semaphorin III; HUPF-1; bcl-2; B-cell leukemia/lymphoma 2 proto-oncogene; HMGP-C; NSP-A; high-chilin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Diagnosing disease by detecting frameshift mutations in RNA or corresponding protein mutations - used to diagnose cancer and neurological diseases, particularly Alzheimer's disease, and also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human presenilin II mutant protein fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY20946;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes a novel method for the diagnosis of a disease caused by, or associated with, an RNA molecule that has a frameshift mutation. The method is used to diagnose age-related diseases, especially cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Van Leeuwen FW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-APR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Fig 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  treatment and prevention with specific ribozymes or wild-type RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ROYA-)
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                                                                                                                                  Sequence
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Similarity
4; Conserve
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                                                                                                                                     13
   Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0043163P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 258pp; English.
                                  40.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FG,
      Score 27; DB
Pred. No. 4.1e
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ARTS & SCI.
                                         DB 2;
4.1e+02
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                                                                       Length 13;
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             Indels
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             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         especially
          Gaps
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used of neuronal system RNA molecules, specifically proteins including beta-amyloid precursor protein (beta-ApP), the microtubule associated proteins Tau and Big Tau, ubiquitin B, applipoprotein E, microtubule associated protein 2 (MAP2), neurofilament-L, neurofilament-M, neurofilament-F, presenilin I, presenilin II, glial fibrillary acidic protein (GPAP), the cellular tumour antigen p53, B-cell leukemia/lymphoma 2 (bcl-2) proto-oncogene, semaphorin III, HUPF-1, high mobility group protein-C (HMGP-C) and neuroendocrine specific protein A
                                                                                                                                                                                     This invention describes a novel method for the diagnosis of a disease caused by, or associated with, an RNA molecule that has a frameshift mutation. The method is used to diagnose age-related disease, especially cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's disease, Down's syndrome, myotonic dystrophy, Huntington's disease, multiple sclerosis, alcoholic liver disease, diabetes mellitus type II and many others listed) or susceptibility to these disorders. The method allows a definitive diagnosis of Alzheimer's disease in living patients, at an early stage. It is based on the observation that disease may be caused by mutations in RNA rather than DNA. The invention describes the
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Diagnosing disease by detecting frameshift mutations in RNA or corresponding protein mutations - used to diagnose cancer and neurological diseases, particularly Alzheimer's disease, and also treatment and prevention with specific ribozymes or wild-type RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Fig 6; 258pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diabetes mellitus type II; microtubule associated protein; Tau; Big Tau; ubiquitin B; apolipoprotein E; MAP2; neurofilament-L; neurofilament-M; neurofilament-F; presenilin I; presenilin I; cellular tunour antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Van Leeuwen FW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       glial fibrillary acidic protein; GFAP; p53; semaphorin III; HUPF-1; bcl-2; B-cell leukemia/lymphoma 2 proto-oncogene; HMGP-C; NSP-A; high mobility group protein-C; neuroendocrine specific protein A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alzheimer's disease; Down's syndrome; myotonic dystrophy; neuronal; Huntington's disease; multiple sclerosis; alcoholic liver disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; beta-amyloid precursor protein; beta-APP; diagnosis; cancer; frameshift mutation; age-related disease; neurodegenerative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYUT-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ROYA-) ROYAL NETHERLANDS ACAD (UYRO-) UNIV ROTTERDAM ERASMUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human microtubule associated protein 2 mutant fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY20420;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY20420 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-609901/51.
DB; AAX75757.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RIJKSUNIV UTRECHT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0043163P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98WO-IB000705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Grosveld FG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Burbach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ARTS &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . JPH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for
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Query Match Best Local Similarity

38.8%;

Score Pred.

26; No.

DB 2; 6.3e+02;

Length 13;

Synthetic

Sequence 13

AA;

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RESULT 12
AARS44972
ID AARS44
XX AARS4
AC AARS4
AC AARS4
AC SOIH
XX SOIGH
XX SOIGH
XX WO941
XX W0941
XX W0941
XX W0941
XX W11-M4
XX W11-
AAW38008
ID AAW3
XX
AC AAW3
AC AAW3
DT 23-1
XX
UB WW C
XX
KW Pept
KW Cytc
KW Cytc
KW WW C
XX
OS Synt
XX
                                                                                                                                                                                                                                                                                                                                                           RESULT 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                         Peptide recognition unit; WW domain; cell signalling; growth regulation; cytoskeleton organisation; targeted drug screening; modulator;
                                                                                                                                                            WW domain binding
                                                                                                                                                                                                                23-APR-1998
                                                                                                                                                                                                                                                                AAW38008;
                                                                                                                                                                                                                                                                                                          AAW38008 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sequence is that of a SorhI Group I grass pollen allergen T epitope corresp. to residues 93-105 of SorhI clone 3S. See also 76. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA encoding allergenic proteins allergen SorhI - for diagnosing, Johnson pollen.
                                                                   WW domain interaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 20; Fig 9; 81pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-2003
31-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1994-167469/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Singh MB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYME ) UNIV MELBOURNE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-OCT-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAY-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9410314-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sorghum halepense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SorhI grass pollen allergen T cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR54972;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR54972 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IgE; allergy; antigen; diagnosis; treatment; Group I allergen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                 4 NYEQIAAY 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 NOEQVSPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QEEISP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QEQVSP 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Knox RB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                              (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92US-00971096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93WO-AU000559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ထ
                                                                                                                                                               clone 4 obtained from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Avijooglu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             proteins and peptide(s) from Johnson grass pollen agnosing, treating and preventing allergy to
                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 25; DB 2;
Pred. No. 9.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                      drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            epitope.
                                                                                      screening; modulator;
                                                                                                                                                            pp library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۰,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR54949-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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RESULT 14
AAE23145
ID AAE23
XX AAE23
XX AAE23
XX AAE23
XX Infl
                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Peptides AAW38005-08 are the sequences of WW domain binding clones CC obtained by screening random or biased libraries with the WW domains of the novel wWP proteins. The present peptide was obtained after screening CC with WW domain 1 of WWP1.1). The peptides are peptide recognition units ("ligands"), and are used for analysing specificities of the WW clomains. The WW domain is a small functional domain. Its name is derived from the observation that two tryptophan residues, one in the amino CC terminal portion of the WW domain and one in the carboxyl terminal CC portion, are conserved. Most proteins containing WW domains have a function involving cell signalling and growth regulation or the CC identified by treating a multivalent recognition unit complex that has CC selective binding affinity for a WW domain with many polypeptides and CC identifying those with selective affinity for the complex. Proteins containing WW domains are used for targeted drug screening, i.e. to identify potential modulators of specific WW domain interactions. Note: CC sequence in SEQ ID listing differs from sequence given in figure. The SEQ ID sequence is as follows: GPSEQPPPYXYIVK
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                       Matches
                  28-MAR-2002
                                                                                                             Haemagglutinin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
Region
                                                 WO200224734-A2
                                                                                                                                        Influenza A virus subtype 16 haemagglutinin (HA)
                                                                                                                                                                            21-AUG-2002
                                                                                                                                                                                                         AAE23145;
                                                                                                                                                                                                                                       AAE23145 standard; peptide; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 92; Fig 27; 220pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Identifying cell signalling and growth regulatory polypeptides by reaction with multivalent recognition complex - polypeptides are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-503234/46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-APR-1997;
                                                                              Influenza A virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        in targetted drug selection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CYTO-) CYTOGEN CORP. (UYNC-) UNIV NORTH CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09737223-A1
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                                                                                                                                                                                                                                                                                                                                                                                     Similarity 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       φ
                                                                                                                                                                                                                                                                                                                        EQPPPYETVK 13
                                                                                                                                                                                                                                                                                                                                                        EQVSPYTLLK 12
                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kay BK,
                                                                                                                                                                         (first entry
                                                                                                             ΗA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96US-00630916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97WO-US005547.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers 6..9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "PPPPY motif"
                                                                                                             protein;
                                                                                                                                                                                                                                                                                                                                                                                                 37.3%;
50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fowlkes DM;
                                                                                                             vaccine;
                                                                                                                                                                                                                                                                                                                                                                                    Score 25; DB 2;
Pred. No. 9.8e+02;
1; Mismatches 4
                                                                                                                                                                                                                                          Ä
                                                                                                             infection
                                                                                                                                                                                                                                                                                                                                                                                                                  Length 13;
                                                                                                                                         protein fragment #9
                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       useful
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RESULT 15
AAR34779
ID AAR34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to influenza A virus subtype (designated H16) haemagglutinin (HA) proteins and nucleic acid encoding such proteins. Sequences of the invention are useful as vaccines. They are also used in the manufacture of a medicament for treating or preventing influenza A virus infections. The present sequence is influenza A virus subtype H16
                                                                Modifying lignin content of plants - encoding lignin biosynthesis enzyme,
                                                                                                                                                                                                                                                                                                                                                                                                        AAR34779;
                                                                                                                                                                                                                                                                                                                                                                                                                             AAR34779 standard; peptide; 13 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated protein of influenza A virus subtype H16 useful preparing vaccines for treating influenza A virus infection, detecting influenza virus in a sample.
                                          Disclosure; Fig 1; 69pp; English.
                                                                                                                                                                            26-APR-1991;
                                                                                                                                                                                                   27-APR-1992;
                                                                                                                                                                                                                                                                        Nicotiana tabacum.
                                                                                                                                                                                                                                                                                                         Tobacco; cinnamyl alcohol dehydrogenase; CAD; tryptic peptide; subunit;
probe; primer; plant; lignin; biosynthesis; biosynthesis; digestibilty;
                                                                                                                                                                                                                                                                                                                                            CAD tryptic peptide, internal sequence 10.
                                                                                                                                                                                                                                                                                                                                                                     25-MAR-2003
16-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; Page 57; 59pp; English.
                                                                                                      WPI; 1993-100982/12
                                                                                                                                                   (ICIL ) IMPERIAL CHEM
                                                                                                                                                                                                                           18-MAR-1993.
                                                                                                                                                                                                                                                                                              feed; cellulose; crop; pathogen; timber.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-416272/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fouchier R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-SEP-2000; 2000GB-00022969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-SEP-2001; 2001WO-IB001914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CHIR-) CHIRON SPA
                                                                                                                            AΜ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 NPYTLV 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6 SPYTLL 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              fragment
                                                                                                                           Inze DG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Olsen B,
                                                                                                                                                                                                                                                                                                                                                                    (revised)
(first entry)
                                                                                                                                                                            91GB-00009063
                                                                                                                                                                                                   92WO-GB000774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    37.3%;
                                                                                                                            Schuch WW;
                                                                                                                                                    IND PLC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Osterhaus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 25; DB 5; L
Pred. No. 9.8e+02;
2; Mismatches 0;
                                                                e.g.
                                                                  comprises use of recombinant DNA e.g. CAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for
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0;

The sequences given in AAR34768-82 represent peptide sequences derived from tobacco cinnamyl alcohol dehydrogenase (CAD) tryptic peptides. Purified CAD consists of two subunits of approximate molecular weights

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CC 42.5 kD and 44 kD. These peptides were derived by trypsin digestion of CC both polypeptides. These peptides were used to produce probes and primers CC used in the production of a recombinant DNA. The CAD CDNA. The CAD CDNA may be CC used in the production of a recombinant DNA comprising a gene which is CC genome by transformation, mRNA transcribed from the coding region CC inhibits production of the enzyme from the endogenous gene. The CC recombinant DNA may be used to provide plants having altered ability to biosynthesis are improvement of digestibility of animal forage crops, CC improvement of the response of crop plants to pathogen attack and CC improvement of timber quality. (Updated on 25-MAR-2003 to correct PN XX Sequence 13 AA;

Query Match Best Local Similarity 80.0%; Pred. No. 1.5e+03; Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0; Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0; Search completed: October 1, 2004, 13:47:59

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